# CITY OF SUNNYVALE
# REPORT
# Planning Commission

**March 28, 2005**

**SUBJECT: 2002-0070** Study Issue to consider changes to utility undergrounding programs and requirements including in-lieu fees.

## REPORT IN BRIEF

This Study describes the current situation of underground and overhead utilities in the City along with a brief discussion of possible revisions to the Sunnyvale Municipal Code related to expanding the undergrounding efforts. The report describes the current requirement for undergrounding utilities, along with options available to change those requirements.

The majority of the City (55%) has undergrounded utilities. That includes newer developed areas, the industrial areas and larger properties. Approximately 15% of the utilities are located overhead along the front of properties and 30% are located overhead along the rear. In terms of visual impacts, the overhead utilities in the front of properties have the greatest impact.

There are several options available to address the overhead utility situation in the City. These options range from leaving the current policies in place with no expansion of undergrounding efforts to the creation of underground utility assessment districts. Each option has benefits and costs. This report provides a brief discussion of each option, but does not go into greater detail until further City Council direction is provided because of the complexities of each option.

The interest in placing utilities underground in Sunnyvale has been ongoing for many years. Extensive coordination with utility companies, the high cost and the impact on numerous property owners makes the issue very complex. The existing code requirements in place require the undergrounding of utilities for new subdivisions, new developments and major alterations to property. The success of these requirements has been mixed. They have been effective for large subdivisions or development projects because undergrounding of existing overhead lines can be completed along with the other utility work on site. The requirements have been less effective in existing older neighborhoods where developments have been singular and the requirement to place the utilities underground have often been found to be infeasible.

Following are a few examples of the difficulty in large-scale undergrounding efforts (each example is discussed in greater detail in this report):

1. **Most overhead utilities are in existing residential neighborhoods**: These areas are the least likely to experience large-scale redevelopment, which is when overhead utilities are usually placed underground. It is extremely difficult and expensive to return to existing neighborhoods in order to underground the utilities.
2. **Rear overhead utilities**: The overhead lines along the rear of existing residential properties have the least visual impact to the general public, yet provide the greatest challenge to underground. In order to underground those utilities, they would need to be relocated to the front of properties. Several properties in a row would need to relocate the utilities to the front right-of-way so there is not a hop-scotching pattern of utilities from front to back. As a result, this would not allow a piecemeal approach to the effort.
3. **High cost to underground:** The enormous cost of placing utilities underground severely constrains individual small property owners. Also, the City is required to contribute to most undergrounding efforts, regardless of who initiates the work. This is because the City is responsible for relocating street lights, signalization, etc. Undergrounding utilities cannot be completed without considerable financial commitment from all parties. See Attachment A for an example of the cost to a typical neighborhood.
4. **Various options to raise capital to underground utilities:** The California Public Utilities Commission has a program called Rule 20 which raises money through utility revenue and is available to cities for undergrounding projects. The use of this money is limited to major arterials and other qualified areas (redevelopment areas, scenic roads). For those properties not qualified for Rule 20 funds, the money needed for the work is the responsibility of the City and/or individual property owners. The amount of money necessary to underground the utilities per property is significant and requires a major commitment from all parties.
5. **Time frame to completion:** Each undergrounding method has its own time frame and complexities. This report does not go into detail about each option. In general, most methods would require hundreds of years for completion, except the creation of assessment districts, which is the most expensive option.
6. **Current requirements:** Current programs which require undergrounding for new subdivisions or major developments will result in success for those specific properties, and should be continued. These efforts are unlikely, however, to affect the older residential areas of the

City where the utilities run overhead. These areas will probably not experience large-scale improvements which would initiate undergrounding efforts.

Staff recommends pursuing Rule 20 funds and to continue undergrounding efforts along arterials. Staff also recommends the City Code be modified to establish priorities for only front overhead utilities, to exempt smaller projects and to require in-lieu fees or deferral agreements for lots in certain cases (e.g. those subject to Rule 20 funding and those where undergrounding is not feasible for qualifying projects).

## BACKGROUND

As originally conceived, this study was intended to consider the development of an in-lieu fee for the undergrounding of public utilities as well as delineating districts throughout the City where such fees could be used (see Attachment E). In addition, the study would also consider the elimination of conduit installations as an alternative to undergrounding. In light of the complexity associated with the undergrounding of utilities, the study evolved to include consideration of a series of alternatives.

*MAPPING OF OVERHEAD UTILITIES*

In order to best understand the current underground utility issue, staff undertook a survey of existing conditions. The mapping could not be obtained from the utility providers, so City staff conducted a citywide reconnaissance to map the current status of overhead utilities.

The analysis began with staff members from the Community Development Department mapping the location of overhead utilities in the City at the parcel level (See Attachment B). Field reconnaissance via “windshield surveys” was conducted. These maps are considered generally accurate, but should not be relied on as the final word on the status of these utilities.

To summarize, above-ground utilities are located along rear property lines in approximately 30% of the City, and along street frontages in 15%. The majority of the areas with undergrounding complete are the newer developed areas where there are large properties, and these constitute approximately 55% of the City. The pattern also varies by location. In Downtown Sunnyvale, in pockets developed in the County, and in the area north of Central between Mathilda and Fair Oaks, there are overhead lines along street frontages. In these areas, service drops cross streets and front yards. Large portions of south and west Sunnyvale have overhead lines along the rear properties. Service drops traverse the back yards in these situations. Most industrial and commercial areas have been undergrounded.

*UNDERGROUNDING HISTORY*

Undergrounding of utilities within the City of Sunnyvale began in May 1967 when the Zoning Code was amended so that the undergrounding of overhead utility lines would, thereafter, be required in connection with any new residential subdivision. The reasons for undergrounding utilities were based on safety, as well as aesthetics. In January 1970 Council approved a further modification in the Municipal Code calling for the undergrounding of overhead utility lines in all new developments (commercial, industrial and residential). In September 1985, due to the substantial costs encountered by developers for the undergrounding of utilities, the City assumed a participatory role in undergrounding costs as follows:

1. One-half the costs of street crossings.
2. The undergrounding outside the frontage of the development based on proportional lineal feet.

Since its implementation, undergrounding in the City of Sunnyvale has had mixed success. Larger residential, commercial or industrial projects with long, clearly defined boundaries fronting streets have been generally successful in meeting undergrounding requirements. The undergrounding of long sections of overhead utilities has a positive visual affect from which the entire community benefits. Large projects also have the advantage of greater financial resources and the percentage of overall project costs for undergrounding is more manageable.

For smaller projects, particularly single-family home redevelopment or replacement, undergrounding costs can have a significant financial impact on the project. Such projects are commonly characterized by a small property sharing multiple boundaries with its neighbors. Undergrounding projects in such locations generally represent marginal aesthetic improvements and often result in disruption on adjoining property. Finally, small lot undergrounding projects are often difficult to design because poles, support wires and associated equipment may or may not be present on the subject property. Each case is unique and the developer is only responsible for facilities on their property. In some cases only the wires (conductors) that cross the subject property need to be undergrounded. In such cases, off-site properties are affected but cannot be required to share costs. In such cases, or where the facilities cross public rights-of-way, the City may participate in project costs. It is sometimes determined that the cost to the City is too great and the project is not completed.

*PLANNING COMMISSION STUDY SESSION*

On November 8, 2004, the Planning Commission considered the undergrounding study at a study session. Generally, the Commission was in favor of an aggressive approach to placing the utilities underground, while understanding the significant costs associated with the improvement. Highlights of the Commission comments and questions are as follows:

1. *Do not create a program that would result in a piecemeal approach- have the improvements done in a coordinated manner.* Undergrounding utilities on a one-by-one basis would be an example of a piecemeal approach. There are several options to raise the capital necessary for undergrounding with the timing of the improvements tied to the costs found acceptable.
2. *What is the expected cost of undergrounding existing overhead utilities?* Research has shown the cost to vary widely from $200 to $1,000 per linear foot. See Attachment A for examples of the cost for a typical neighborhood.
3. *Where are rear yard overhead utility lines placed underground- in the front or rear?* Staff contacted different cities which have experience with this issue, and the undergrounding usually occurs in the front of the properties within right-of-way.
4. *Coordinate undergrounding with other civil improvements in the right-of-way, such as repaving, replacing gas or sewer lines or the installation of fiber optic lines.* The City should coordinate efforts in the right-of-way to reduce costs and inconvenience to the public. The status of adding fiber optic lines in the City is unknown. Staff practice is that work in the public right-of-way is coordinated and scheduled with other contemplated public improvements.
5. *Does undergrounding of utilities affect property values? Does a property owner within a future underground area need to disclose that information upon sale?* It is generally assumed that properties that have the utilities placed underground are more aesthetically pleasing than those with overhead lines, so the result is that the properties might be considered more valuable. If a property is located in a utility district or if a document requiring future undergrounding has been recorded, that information would be disclosed to interested buyers.
6. *Eliminating poles in the middle of sidewalks should be a high priority, particularly on busy roads.* Staff notes that this situation occurs primarily along arterials, where the streets travel-way has been widened, relocating the sidewalk to the area occupied by utility poles.

## EXISTING POLICY

The following policies and action statements relate to undergrounding issues:

Community Design Sub-Element:

**Policy 2.5B.3** Minimize elements which clutter the roadway and look unattractive.

*Action Statement 2.5B3a* Maintain the requirements for undergrounding overhead utility wires.

**Policy 2.5C.3** Ensure that site design creates places which are well organized, attractive and safe.

**Policy 2.5D.3** Work with outside government agencies to achieve attractive public and quasi-public facilities consistent with the quality of development in Sunnyvale.

*Action Statement 2.5D3d* Encourage PG&E and Southern Pacific Railroad to improve the appearance of transmission line easements and railroad lines.

CURRENT CODE REQUIREMENTS

Currently the Municipal Code requires that "All utilities and communication services associated with new development, redevelopment, subdivision or change in use shall be placed underground."

A summary of the current Code includes:

- Utilities to be underground include sewer, water, gas and all electric and communication facilities such as telephone, cable television, fiber optics etc.
- Such undergrounding includes both building service (laterals and service drops) and distribution (boundary) facilities of 34.5 KV or less. Section 19.38.090 also includes a listing of general requirements and exempt facilities.
- Section 19.38.100 requires that the developer bear all costs associated with placing utilities underground subject to certain exceptions. Exceptions would include where lines cross a public right-of-way or other private property not controlled by the developer. For example, undergrounding is not required where there are no poles on the subject property. Service drops, however, are required to be relocated underground.
- Allocated costs for undergrounding of utilities will vary depending upon the situation. The developer may be required to share costs with the City or pay a pro rata share. In most situations the applicant is required to place their service drop underground, but rarely are boundary utilities required to be placed underground. The undergrounding requirement is waived when unique situations

exist which would make undergrounding either infeasible or unreasonable. The current undergrounding ordinance does not incorporate an in-lieu fee provision.

- The Code allows for the waiver of undergrounding requirements where "topographical, soil or any other condition makes underground installation of such facilities unreasonable or impracticable, or if such undergrounding would result in the deleterious erection of alternate above-ground facilities for servicing other properties."

## DISCUSSION

The original intent of this study issue was to review the feasibility and effectiveness of an in-lieu fee for sites that either did not trigger undergrounding requirements or were not feasible for undergrounding due to small piecemeal development. Staff reviewed the options for in-lieu fees and encountered significant cost and timing issues which would limit the effectiveness of the program.

**Source of funding:** As stated earlier, the cost of undergrounding is enormous. The following table shows the estimated cost to underground utilities throughout the City:

| Estimated Total Cost of Undergrounding Utilities | Estimated Number of Neighborhoods | Neighborhood Cost @ $200/linear ft. | Neighborhood Cost @ $400/linear ft. |
|---|---|---|---|
| Average cost per neighborhood | | $3,190,000 | $6,380,000 |
| Front overhead lines | 21 | **$66,990,000** | **$133,980,000** |
| Rear overhead lines | 65 | **$207,350,000** | **$414,700,000** |

Given this high cost, it needs to be determined how best to raise the money for the improvements, if it is pursued at all. If the goal is to underground utilities in the City, the decision needs to be made regarding the source of the funds for these improvements. As stated in this report, these methods include in-lieu fees, deferral agreements, Rule 20 funds, development fees or utility districts.

Undergrounding Methods

Listed below are discussions of various techniques that would effect undergrounding, including in-lieu fees. Each technique has unique constraints and benefits; techniques can be combined. Staff has not attempted to deliver an exhaustive study of each technique, but to provide an overview.

**A. In-Lieu Fees:** In-lieu fees work best in areas where large scale development or redevelopment occurs. In Sunnyvale, the majority of overhead utility lines run through established residential areas. It is unlikely that wholesale redevelopment will occur in these residential areas. Because of the extremely high cost of undergrounding, which varies from $1,000,000-$3,000,000 per mile (equating to $15,000 to $60,000 per average-sized property), significant money would need to be raised through in-lieu fees to meet the goal of undergrounding the utilities in the City. The in-lieu fees in these residential areas would need to be very high to meet the goals or else a time frame of several centuries would pass before the results could be attained. Staff feels it would be unfair to require individual residential property owners to pay in-lieu fees for use in future undergrounding work which would not occur for hundreds of years, if ever.

In-lieu fees can be effective tools in certain cases where the undergrounding of utilities is feasible, but the timing is such that it would not occur at the same time as the other site improvements. In those cases, an in-lieu fee can be effective to provide the capital needed to complete the undergrounding along the right-of-way. Examples of the situations in which in-lieu fees are appropriate include areas where Rule 20 funds are available but the work is not ready to proceed and when a project requires undergrounding but the timing or cost for the entire area is not established. These cases are anticipated to be short time frames where the undergrounding work is expected to occur within a few years of the payment of the fee.

Staff contacted several nearby cities in the County of Santa Clara to research the guidelines each uses for determining in-lieu fees for undergrounding utilities (Attachment C). Several cities allow applicants to pay an in-lieu fee for undergrounding utilities; the cities of Campbell and Mountain View do not provide for in-lieu fees.

Staff will return to the Council with proposed ordinance language if the in-lieu fee option is chosen.

**B. Prioritization:** It is possible to rank the importance of placing overhead utilities underground based on the benefit to the community. Overhead utilities are most noticeable to the general public when placed in the front of

properties. Overhead utilities placed in the back of properties are visible mainly from the individual properties in which the poles and lines are located. Prioritizing where the undergrounding improvements would occur could ensure the greatest value to the majority of the City.

There are several types of overhead utility lines throughout the City. Based on these observations, Council might wish to establish priorities based on the following categories:

1. Overhead along arterials
2. Residential and commercial, overhead in front
3. Industrial, overhead in front
4. Residential and commercial, overhead in back
5. Industrial, overhead in back.

**C. Rule 20 Undergrounding Programs:** Funded by an electric tariff filed with the California Public Utilities Commission (Rule 20), Pacific Gas and Electric Company (PG&E) undergrounds approximately 30 miles of electric facilities each year within the entire PG&E service area. Projects performed under Rule 20 are nominated by a city, county or municipal agency for ranking by PG&E and the other utilities. It should be noted that most residential neighborhoods do not qualify for Rule 20 funds (unless they are located on a major arterial, are in a redevelopment or historic area, etc.). With a few exceptions, Rule 20 funds only apply to major arterials.

*Rule 20A*
Rule 20A projects are typically in areas of a community that are used most by the general public. To qualify, the governing bodies of a city or county must, among other things, determine that undergrounding is in the general public interest for one or more of the following reasons:

- Undergrounding will avoid or eliminate an unusually heavy concentration of overhead electric facilities.
- The street, road or right-of-way is extensively used by the general pubic and carries a heavy volume of pedestrian or vehicle traffic.
- The street, road or right-of-way adjoins or passes through a civic area or public recreation area or an area of unusual scenic interest to the general public.
- The street, road or right-of-way is considered an arterial street or major collector as defined under State law.

*Other Rule 20 Programs*
There are other Rule 20 funding programs available (Rule 20B and Rule 20C), but do not generally apply in Sunnyvale.

*Existing City Policy for Rule 20 Funds*
According to recent communication with PG&E, the City has a credit of $6,855,657 for use in Rule 20 projects (as of 1/1/04). Based on past allotments from Rule 20 funds, the City can anticipate approximately $800,000 per year (for 5 years) for the purpose of planning future Rule 20 projects. This amount of $4,000,000 combined with the existing credit totals approximately $11,000,000 for use on qualified Rule 20 improvements.

Rule 20 funds are only for the undergrounding of utilities along the right-of-way. There is also a cost for the service drops, meter panels and street lights, which have historically been paid by the City. The cost for this work can range from $300 to $400 per linear foot. This additional cost to the City is one of the reasons there have not been further improvements along the arterials. Recent changes to the Rule 20 regulations may now allow some of the costs on private property to be covered by Rule 20 funds.

Rule 20 Program funds are monitored by the City's Public Works Department. In 1985 the City established priorities based on a chronological order of projects proposed for Rule 20 use. The City has undergrounded several arterials using Rule 20 funds. There are still at least 5 additional arterials identified eligible for Rule 20 funded undergrounding (Attachment D).

Aggressive use of existing and future Rule 20 funds may be considered. These improvements could have a significant positive impact to those who live and work in the City. There are, however, substantial costs to the City for Rule 20 projects.

One of the first steps in pursuing Rule 20 funds is to return to the City Council with a Capital Project for the City share of the undergrounding costs.

**D. Deferral Agreements:** This technique acknowledges a practice already utilized in the City to some extent. These agreements are used where the undergrounding of utilities is required on a specific property, but determined to be impractical or infeasible at the time of development. A formal participation or deferral agreement may be entered into which defers the work and payment until such time as the City directs. This type of agreement is recorded against the property.

The cost to the City associated with this option would mainly be in managing the program. This approach is similar to in-lieu fees; they would have little noticeable effect in the existing residential area because redevelopment and/or expansions are scattered and infrequent; but could be effective for qualifying projects or areas where Rule 20 funds can be used.

**E. City-wide fee or tax:** City may consider adopting a city-wide program to fund future utility undergrounding. Although this alternative may have the most appeal because it would generate funds more quickly, it will require careful legal analysis because of the constraints imposed by Proposition 218 and the Mitigation Fee Act (Gov. Code §66000 et. Seq.). It may be possible to craft a city-wide fee for all properties if it can be demonstrated that the fee is benefiting all property owners, is proportional, and only has to be paid one time. Conversely, the city could ask the voters to approve a special tax for the purpose of funding utility undergrounding.

The advantages of this option are that an across-the-board fee would accrue greater fee amounts which would be necessary to effectively impact the underground utility situation. Also, the amount of the fee per user would be relatively small when calculated on a per parcel basis, but the return could be significant. Types of fees or taxes can include a construction fee or tax (perhaps paid through building permits), bonds, utility fee or tax, etc. This approach could also allow the installation of additional features, such as fiber optics; however, only 45% of the City, which currently have overhead utilities, would be able to coordinate fiber optic installation with undergrounding of existing overhead utilities.

A detailed legal analysis and significant community input regarding this option would be required prior to implementation. Staff completed a cursory review of other jurisdictions in the area and has not found this technique used for undergrounding utilities. If Council is interested in further consideration of this option, staff recommends that it be cast as a continuing or new study issue.

**F. Utility Assessment Districts/Benefit Assessment Districts:** To date, no utility assessment districts solely for the purpose of undergrounding utilities have been established in the City of Sunnyvale (note that an Assessment District has been established for properties located on Conway Road for the installation of water, sewer, street, and undergrounding of utilities). Establishment of assessment districts is a tool that may be considered by a local agency to lend emphasis to the community's undergrounding efforts. Such programs can take many forms but most commonly consist of a joint program with the utility companies where each agrees to participate in an undergrounding district and pay a share of the costs when it is formed. The creation of assessment districts requires extensive outreach, public participation and the vote of property owners to legally create the district.

Council may wish to consider the development of an assessment district program as an option for undergrounding of utilities as a future study issue.

Overall, such a program would be the most effective and potentially the most expensive for property owners.

**G. Modify Current Requirements:** The current code requires any new development to underground utilities, regardless of the location on the property, size of lot or size of project. Individual residential property owners may be required to either place the utilities underground or record a deferral agreement to require future participation in undergrounding efforts.

These requirements could be amended to exempt small lots and projects from undergrounding requirements because of the unlikelihood of the properties in the existing residential neighborhoods to have large-scale undergrounding efforts. Also, properties with overhead utilities running along the rear of properties could be exempt because it is unlikely that these utilities will be moved to the front along the entire block.

**H. Maintain Current Requirements:** The current undergrounding requirements have succeeded in undergrounding 55% of the City's overhead utilities. They have been effective for larger projects and larger lots. The requirements for the residential areas only apply when properties are redeveloped, not for remodels or renovations. The likelihood of large portions of the existing residential areas to be redeveloped is limited, which means the likelihood of undergrounding to occur in those areas is remote. Nevertheless, under the current law, staff must investigate the feasibility of undergrounding for each small residential development, and waive the requirement if it is not feasible. This is additional work for the staff and the property owner. If a deferral agreement were recorded against the project, it would negatively affect the value of the property, even though the agreement may never be exercised.

## FISCAL IMPACT

Future implementation of any of the options discussed in this report would result in costs to the City related for the management and handling of collected fees and/or assessment district operational costs. Administration of any new program could range from $3,000 to $10,000 per year. Those options selected by Council for further consideration will be accompanied by a detailed analysis of their fiscal impact. Annual revenues would range from $0 to $1,000,000, as shown in this discussion, and would be used to fund the undergrounding work.

## CONCLUSION

Sunnyvale's undergrounding program has been generally successful for large subdivisions and major redevelopment projects. It has been marginally successful for smaller developments, and not at all successful for small sites.

Although many residential neighborhoods are experiencing major changes, these tend to be expansion or remodeling of homes and not redevelopment that would trigger undergrounding. In the cases where undergrounding might technically be feasible, it is frequently waived and occasionally deferred due to the impracticality of a small project.

This study was first envisioned to explore an in-lieu fee for those situations where there were missed opportunities for undergrounding. A review of the data suggests that in-lieu fees would not be effective in smaller residential areas. An in-lieu fee for redevelopment of a home would be piecemeal and not likely to raise significant revenues associated with a neighborhood that could contribute to large-scale undergrounding efforts.

In-lieu fees or deferral agreements, though not appropriate in established residential areas, can be effective for larger qualifying projects. If the Council wants to consider these options, staff can return at a later date with more information and draft ordinance language.

The City does have access to Rule 20A funds that could be used to underground major arterials and certain historic areas of the community. These funds could be available to complete or nearly complete undergrounding of major arterials in less than 20 years; however, the City would need to provide for some of the costs, which could be upwards of $7 million, over the 20-year period.

There are several options available to address the undergrounding issue. The prioritization of locations subject to undergrounding is a key area to consider. By first setting those priorities, the later decisions of which type of undergrounding program to implement would become clearer. It is possible to exempt overhead utilities located along the rear of properties because the impact of those are relatively insignificant, while those located along the front of properties have the greatest impact.

Given the current fiscal situation in the City and the high cost of the improvements, the community may decide to push for Rule 20-funded improvements, but not change the existing overhead utility condition in the established neighborhoods. The City Council can also consider making no changes to the Code and maintain the current requirements without amendments. Another option is to use current requirements only for larger projects (e.g. those with over 150 foot frontage, or 3 or more units or lots greater than 15,000 square feet in size).

The consideration of larger program options, such as development fees/tax or utility districts will require more thorough research and review. If the City

Council is interested in these options, staff would prepare specific programs through the Study Issue process, including costs and timing.

## PUBLIC CONTACT

For this Citywide Study Issue, the following public notice was provided:

| Notice of Negative Declaration and Public Hearing | Staff Report | Agenda |
|---|---|---|
| • Published in the *Sun* newspaper<br>• Two separate notices were mailed to 159 parties, including homeowner associations, developers, builders, Chamber of Commerce, major property owners and financial institutions throughout the City announcing the undergrounding study and public hearings. | • Posted on the City of Sunnyvale's Website<br>• Provided at the Reference Section of the City of Sunnyvale's Public Library | • Posted on the City's official notice bulletin board<br>• City of Sunnyvale's Website<br>• Recorded for SunDial |

Three telephone calls were received by staff on this study about the status and recommendations of the report.

## ALTERNATIVES

1. Make no change to current requirements.
2. Direct staff to prepare an ordinance to require in-lieu fees when any property with above ground utilities is redeveloped.
3. Determine that undergrounding utilities is a high priority and direct staff to return with a funding program that will accelerate the completion of undergrounding, such as:
    a. City-wide fee or tax on development
    b. Utility assessment district
4. Pursue Rule 20 funds and projects including arterials and qualifying Redevelopment and historic areas and direct staff to return with a program showing costs, time frames and available funding.
5. Direct staff to prepare amendments to the Code that:
    a. Eliminate undergrounding requirements for existing single-family properties with utilities in the rear.
    b. Allow for in-lieu fees or deferral agreements when immediate undergrounding is not feasible for qualifying projects.
    c. Allow for the payment of an in-lieu fee or a deferral agreement (as determined most appropriate by decision making body) for a redeveloping property located in a “Rule 20 Area.”

d. Continue to require undergrounding of utilities located in the front but exempt projects less than 150 feet of frontage and less than 15,000 s.f. of land area.

**RECOMMENDATION**

**Alternative 4,** pursue improvements using Rule 20 funds, and continue to underground utilities along major arterials and direct staff to return with a program showing costs, time frames and available funding. Also, pursue other qualifying areas using Rule 20 funds until all arterials and eligible areas are complete.

**Alternative 5,** exempt single-family areas with overhead service in the rear and sites with less than 150 feet of front service, and provide for in-lieu fees and deferral agreements. This accepts the fact that most existing overhead utilities will remain given the built-out residential situation of the City. Undergrounding requirements can still be waived if it is found infeasible or impractical for the improvement proposed. If this option is chosen, Staff would return to the City Council with revisions to the Code which would allow the following options:

**Alternative 5a,** overhead lines in the rear of single-family properties are impractical to underground because the lines would need to be moved to the front of the properties, which would require entire blocks to complete the work. Also, the visual impact of rear overhead lines is insignificant to the community.

**Alternative 5b,** in cases where undergrounding is reasonable (e.g. large residential, commercial or industrial properties), but the timing to complete the undergrounding is not feasible, the collection of an in-lieu fee or the requirement of a deferral agreement allows the City to ensure the property owner or developer will participate in the improvements when they occur.

**Alternative 5c,** in-lieu fee or deferral agreement for any property improvement along a Rule 20-defined arterial. This allows for participation by the property owner or developer in undergrounding efforts along arterials with the assumption that those areas will be the first to have the utilities placed underground.

**Alternative 5d,** those sites which have limited frontage along the street and on smaller lots can be exempt from requiring undergrounding of utilities because the cost per foot would be enormous.

Staff finds that undergrounding options work best for properties and developments large enough to be effective and cost affordable. The majority of the residential areas of the City will probably not experience large-scale redevelopment, but more of one-at-a-time improvements. The cost of placing

utilities underground is substantial, and staff feels it is an unreasonable burden for individual residential property owners to bear. In-lieu fees or deferral agreements are also unreasonable for single residential lots because the timing of collecting these items until the entire block has redeveloped is likely to be decades, or longer. Staff feels it is acceptable to accept the current overhead utility situation in these residential areas of the City.

In cases along Rule 20-eligible areas, all efforts should be used to underground the utilities- these include using Rule 20 funds, in-lieu fees and/or deferral agreements.

Finally, there are sites which are physically suitable for the undergrounding of utilities, but the timing for those improvements may be pre-mature (other improvements are anticipated for that and/or funds for City participation have not been allocated). In those cases, the collection of an in-lieu fee or deferral agreement is appropriate because the work will likely occur in a short time frame. Any undergrounding requirements can still be waived if it is found infeasible or impractical for the improvement proposed.

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Attachments:

A. Example of Costs- Sample Neighborhood
B. Map of Underground Utility Survey
C. Survey of Cities in Santa Clara County
D. Arterials completed or eligible using Rule 20 funds
E. Original Study Issue for Undergrounding Utilities

# Survey of Cities in Santa Clara County
# Undergrounding of Utilities Requirements

| | Governing Code/Initiating Act | In-lieu fee allowed? | How is in-lieu fee calculated and collected? | Can req'ts be waived? If so, what are criteria? |
|---|---|---|---|---|
| **Campbell** | Zoning Ordinance- Site Development Standards | Not done for utilities | N/A | Yes. The CDD Director can waive if unreasonable or impractical for reasons of cost, if other overhead utilities exist and the likelihood of other UG utilities in area |
| **Cupertino** | Zoning Ordinance- all new development. Subdivision Ordinance- new subdivisions and condo conversions | Yes, for subdivisions at PC's discretion. | Fee determined by City Engineer. It is 1/2 of normal cost of UG'ing existing utilities on residential streets. Condition of TM. Fees deposited in special UG account | Yes. If exceptional or extraordinary topography, soils conditions exist. Also if new developed area adjoins previously developed areas on three sides |
| **Los Gatos** | Municipal Code- any new development or remodel. Subdivisions- new subdivisions | If utilities have already been undergrounded by Town, applicant needs to reimburse Town of their share | Right-of-way and street improvement costs calculated in ordinance | Can be waived |
| **Milpitas** | Zoning Code- required in R3, R4, M1, Mp and MXD zones. Subdivision Code- all utilities required to be placed underground. | It has been used in the new Mid-Town Specific Plan area where there are small lots with limited street frontage | In those cases in Mid-Town, the fee has generally been $450/linear foot | In subdivision Code there are exceptions. City Council can waive if topography, soil or other conditions make UG unreasonable or impractical |

| | Governing Code/Initiating Act | In-lieu fee allowed? | How is in-lieu fee calculated and collected? | Can req'ts be waived? If so, what are criteria? |
|---|---|---|---|---|
| **Mountain View** | Subdivision Ordinance only | No | N/A | If City finds that the topography, soils or other conditions make UG unreasonable or impracticable |
| **Palo Alto** | UG Utility chapter to Code- all new construction. Subdivision Code- all utilities required to be placed underground. | Allowed, but not often used. Palo Alto has it's own electric utility, so their criteria may vary from those working with PG&E | Fee based on a case-by-case basis | Director of Utilities can ok overhead utilities where UG is not feasible or practicable |
| **San Jose** | Subdivision section of Code | Yes. UG fee program for new development used for conversion of overhead utility facilities. | Based on amount per linear foot of frontage- on percent basis. Paid prior to recording of Final Map or issuance of Building Permit | Yes. Can be exempt from fee if site is adjacent to an UG utility district established prior to 7/1/88, for minor projects or if found to be unreasonable or impractical due to topography or soils |
| **Santa Clara** | Subdivision section of Code | Yes, if in UG Utility District. Santa Clara has it's own electric utility, so their criteria may vary from those working with PG&E | Case-by-case | Handled on a case-by-case basis. Not in ordinance |

**EXAMPLE OF COST FOR TYPICAL NEIGHBORHOOD**

Staff prepared a rough estimate of the costs associated with undergrounding overhead utilities located in the front yards of a typical residential area. The block area includes properties fronting on Sunset, Washington, McKinley, Charles and Evelyn Avenues, of which all have overhead lines located in the front. This neighborhood was selected because it has the overhead lines in front and is an established neighborhood which will be unlikely to experience large-scale redevelopment that would trigger undergrounding.

Studies have shown a range of costs for undergrounding utilities from $200-$400 per linear foot. By way of example, a $300 per linear foot cost was used to estimate the costs. The result is that the total cost (with the required service drops included in the costs) would be approximately $24,000 per property or $6,550,000 for the entire ten block area.

The following data shows the cost for the subject area:

| Street | Linear feet | Cost @ $300/ft | # of Properties | Cost/Parcel @ $300/ft | Cost @ $300/ft w/service drops |
|---|---|---|---|---|---|
| Sunset | 1650 | $495,000 | 32 | $15,469 | $20,469 |
| Pastoria | 1650 | $495,000 | 40 | $12,375 | $17,375 |
| Waverly | 1650 | $495,000 | 52 | $9,519 | $14,519 |
| Florence | 1650 | $495,000 | 55 | $9,000 | $14,000 |
| Charles | 1650 | $495,000 | 27 | $18,333 | $23,333 |
| Evelyn | 2200 | $660,000 | 10 | $66,000 | $71,000 |
| Muender | 1100 | $330,000 | 31 | $10,645 | $15,645 |
| Coolidge | 1100 | $330,000 | 45 | $7,333 | $12,333 |
| Lewis | 1100 | $330,000 | 36 | $9,167 | $14,167 |
| Washington | 2200 | $660,000 | 22 | $30,000 | $35,000 |
| | **Total** | **$4,785,000** | **350** | Average $13,671 | Average **$23,784** |

The information above shows the total and average costs to underground the utilities at one time for a neighborhood. The cost to underground utilities for smaller developments, such as one to three contiguous lots, would be substantially higher per linear feet. Recently, an approved eight lot townhouse project was approved on Wolfe Road with the requirement to underground the overhead utilities in the front of the property. The applicant received a preliminary cost estimate from PG&E of $178,000 to underground the utilities.

The property is 79 feet wide along Wolfe Road, which would amount to a cost of $2,253 per linear foot. This may be an extreme case, but it does show the high cost of requiring undergrounding for small lots because there are no economies of scale. In addition, there would be a City contribution for service drops to adjacent properties and a cost to modify street lights. This cost is estimated to be $300-400 per foot.

**Arterials Completed Or Eligible Using Rule 20 Funds**

The following table shows the arterials which have had the utilities placed underground using Rule 20 funds:

| No. | Location/Description | Status |
|---|---|---|
| 1. | Mathilda; El Camino Real to Washington | Completed < 1986 |
| 2. | El Camino Real; West City limit to East City Limit | Completed < 1986 |
| 3. | Mathilda; SPRR to Almanor Avenue (Hwy 101) | Completed < 1986 |
| 4. | Sunnyvale-Saratoga Rd; Homestead to Sunnyvale Ave. | Completed < 1986 |
| 5. | Mary Ave.; Bidwell Ave. to 500 feet north of Evelyn Ave. | Completed < 1986 |
| 6. | Fairoaks Avenue; Maude Avenue to Birch Avenue | Completed – 1999 |
| 7. | Hollenbeck Avenue; Vicinity of Conway Road | Completed – 2003 |

Arterials yet to be completed, but eligible for Rule 20 funds:

| | Location/Description | Length | Est. City Cost | Est. PGE Cost |
|---|---|---|---|---|
| 1. | Fair Oaks Avenue: Evelyn to El Camino Real | 4,300 LF | $1,400,000 | $3,000,000 |
| 2. | Wolfe Road: Homestead Road to El Camino Real | 5,400 LF | $1,700,000 | $4,000,000 |
| 3. | Wolfe Road: El Camino Real to Old San Francisco | 2,800 LF | $1,100,000 | $2,800,000 |
| 4. | Pastoria: El Camino Real to Evelyn Avenue | 3,900 LF | $1,200,000 | $2,500,000 |
| 5. | Maude Avenue: Fair Oaks Avenue to Mathilda Ave. | 4,050 LF | $1,300,000 | $3,300,000 |
| | | Total | $6,700,000 | $15,600,000 |